

Notice of Allowability

Application No.

10/670,786

Examiner

Joseph L. Perrin, Ph.D.

Applicant(s)

KIM ET AL.

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 11 May 2007.
2. ☒ The allowed claim(s) is/are 1, 2, 4 and 5.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT & STATEMENT OF REASONS FOR ALLOWANCE

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Michael I. Angert on 17 May 2007. The amendment was made to clarify the claim language consistent with the original disclosure as filed, for instance, as clearly shown in Figures 5 and 6.
3. The application has been amended as follows:

In the Abstract:

A tub assembly in a drum-type washing machine includes a tub body having a cylindrical shape forming front and rear edge portions; a ring-type tub cover coupled with the front edge portion of the tub body; a tub back, coupled with the rear edge portion of the tub body, comprised of an outer circumference wall ~~rising vertically~~ extending horizontally to a predetermined ~~height~~ distance with respect to an outer circumference of a circular panel forming a recessed space, the outer circumference wall in tight contact with the rear edge portion of the tub body; and a motor assembly loaded at the recessed space. The tub assembly enables a reduction in tub size and weight, by devising a construction that obviates the need for a bracket for fixing a bearing housing to a tub back and this minimizing a rearward protrusion of the bearing housing and tub back.

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In the Specification:

In paragraph [0029] on page 6, please amend as follows:

[0029] To achieve these objects and other advantages and in accordance with the purpose of the invention, as embodied and broadly described herein, there is provided a tub assembly in a drum-type washing machine, comprising a tub body having a cylindrical shape forming front and rear edge portions; a ring-type tub cover coupled with the front edge portion of the tub body; a tub back, coupled with the rear edge portion of the tub body, comprised of an outer circumference wall ~~rising vertically~~ extending horizontally to a predetermined ~~height~~ distance with respect to an outer circumference of a circular panel forming a recessed space, the outer circumference wall in tight contact with the rear edge portion of the tub body; and a motor assembly loaded at the recessed space.

In paragraph [0040] on page 8, please amend as follows:

[0040] The tub back 203 includes an outer circumference wall 203a at the periphery of a circular panel 203b having a center hole 203d. The outer circumference wall 203a ~~risers vertically~~ extends horizontally, to a predetermined ~~height~~ distance, with respect to the circular panel 203b. The tub back 203 is formed such that the outer diameter of the tub back including the outer circumference wall 203a is equal to, or just slightly less than, the inner diameter of the tub body 202, to establish a tight fit. The center hole 203d is provided for receiving a motor shaft 45 of a motor assembly 40 that will be attached to the tub back 203.

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In the Claims:

Claim 1:

1. (Currently Amended) A tub assembly in a drum-type washing machine, comprising:

a tub body having a cylindrical shape forming front and rear edge portions;

a ring-type tub cover coupled with the front edge portion of the tub body;

a tub back, coupled with the rear edge portion of the tub body, comprised of an outer circumference wall ~~rising vertically~~ extending horizontally to a predetermined height distance with respect to an outer circumference of a circular panel forming a recessed space, the outer circumference wall in tight contact with the rear edge portion of the tub body;

a motor assembly loaded at the recessed space; and

a bearing housing, wherein the tub back, the tub body, and the bearing housing are coupled by a coupling member that is coupled with the bearing housing through the rear edge portion of the tub body and the outer circumference of the tub back.

Allowable Subject Matter

4. Claims 1, 2, 4 & 5 are allowed.

5. The following is a statement of reasons for allowance: The closest prior art of record, U.S. Patent No. 6,510,716 to KIM et al., fails to teach each and every limitation of the instant invention. Specifically, KIM et al. fails to teach claimed tub assembly comprising, *inter alia*, the tub body, tub back and bearing housing configuration having a coupling member coupled to the bearing housing through the rear edge portion of the

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tub body and through the outer circumference of the horizontally extending tub back, as described in claim 1.

6. Further, KIM et al. and the prior art of record, apparently fail to provide any reasonable suggestion or the requisite motivation for making the instantly claimed combination. For at least the foregoing reasons, claims 1, 2, 4 & 5 are believed to recite patentable subject matter.

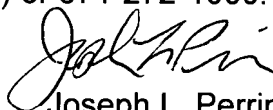
7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joseph L. Perrin, Ph.D.
Primary Examiner
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JLP